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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,518	09/29/2003	Yoshihisa Suda	053466-0369	9110

22428 7590 07/13/2006

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EXAMINER

DUNWIDDIE, MEGHAN K

ART UNIT PAPER NUMBER

2875

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/671,518	SUDA ET AL.	
	Examiner	Art Unit	
	Meghan K. Dunwiddie	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>04/21/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is a Non-Final Rejection in response to the Request for Continued Examination (RCE) filed April 21, 2006 by **Suda et al.**

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on April 21, 2006 has been entered.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on April 21, 2006 is in compliance with the provisions of 37 CFR 1.97, and accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ott** et al. (US 6371635) in view of **Konishi** et al. (US 2002/0096984).

5. Regarding Claim 1, **Ott** et al. shows a vehicle lamp comprising:

- A lamp body for holding therein a light source [Figure 3: (24)];
- A lens mounted on the front of said lamp body [Figure 3: (7)];
- A heating element mounted within said lamp body and apart from said light source and said lens [Figure 3: (25)];
- Wherein heat rays radiated from said heating element irradiate a rear surface of said lens [See column 5 lines 5-17]
- And wherein the heating element does not interrupt light rays from the light source to the lens [Figure 3: (25, 24, and 7)].

6. **Ott** et al. does not show:

- A carbon-based heating element.

7. **Konishi** et al. teaches:

- A carbon-based heating element [Figure 1: (1)].

8. It would have been obvious for one of ordinary skill in the art, at the time of the invention to provide the vehicle lamp of **Ott** et al. with a carbon-based heating element

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as taught by **Konishi** et al. for the purpose and advantage of providing a means of heating the lens of the lamp body and melting any snow or ice formed on the lens of the lamp body.

9. Regarding Claim 2, **Ott** et al. shows the claimed invention as cited above, but does not specifically teach a glass tube for sealing therein the carbon-based heating element.

10. **Konishi** et al. teaches:

- A glass tube for sealing therein said carbon-based heating element [Figure 1: (2 and 1)].

11. It would have been obvious for one of ordinary skill in the art, at the time of the invention to provide the vehicle lamp of **Ott** et al. with a glass tube as taught by **Konishi** et al. for the purpose and advantage of protecting the carbon-based heating element from hanging down or oxidation at high temperatures.

12. Regarding Claim 3, **Ott** et al. shows the claimed invention as cited above, but does not specifically teach the carbon-based heating element containing amorphous carbon and carbon powder dispersed in said amorphous carbon.

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13. **Konishi** et al. teaches:

- Said carbon-based heating element contains amorphous carbon and carbon powder dispersed in said amorphous carbon [See page 4 paragraph [0042] lines 2-6 in reference to Figure 1: (1)].

14. It would have been obvious for one of ordinary skill in the art, at the time of the invention to provide the vehicle lamp of **Ott** et al. with a carbon-based heating element containing amorphous carbon and carbon powder dispersed in the amorphous carbon as taught by **Konishi** et al. for the purpose and advantage of constructing an element closely comparable to pure carbon material and resulting in high radiation efficiency.

15. Regarding Claim 4, **Ott** et al. shows the claimed invention as cited above, but does not specifically teach the carbon-based heating element further contains a metal or metalloid compound.

16. **Konishi** et al. teaches:

- Said carbon-based heating element further contains a metal or metalloid compound.

17. It would have been obvious for one of ordinary skill in the art, at the time of the invention to provide the vehicle lamp of **Ott** et al. with a carbon-based heating element containing a metal or metalloid compound as taught by **Konishi** et al. for the purpose

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and advantage of producing an element with resistance larger than that of pure carbon by several times.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meghan K. Dunwiddie whose telephone number is (571) 272-8543. The examiner can normally be reached on Monday through Friday 8 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MKD


Stephen Husar
Primary Examiner